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BEFORE THE BOARD OF PATENT APPEALS AND INTERFERENCES

Application Number: 09/844,932

Filing Date: April 26, 2001

Appellant(s): SIBLEY, ERIN H.

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Technology Center 2600

Georgann S. Grunebach For Appellant

EXAMINER'S ANSWER

This is in response to the appeal brief filed 12 September 2006 appealing from the Office action mailed 02 March 2006.

Application/Control Number: 09/844,932 Page 2

Art Unit: 2623

(1) Real Party in Interest

A statement identifying by name the real party in interest is contained in the brief.

(2) Related Appeals and Interferences

The examiner is not aware of any related appeals, interferences, or judicial proceedings which will directly affect or be directly affected by or have a bearing on the Board's decision in the pending appeal.

(3) Status of Claims

The statement of the status of claims contained in the brief is correct.

(4) Status of Amendments After Final

The appellant's statement of the status of amendments after final rejection contained in the brief is correct.

(5) Summary of Claimed Subject Matter

The summary of claimed subject matter contained in the brief is correct.

(6) Grounds of Rejection to be Reviewed on Appeal

WITHDRAWN REJECTIONS

The following grounds of rejection are not presented for review on appeal because they have been withdrawn by the examiner. The 35 USC 112, first paragraph, rejection on claims 1 and 13 have been withdrawn.

(7) Claims Appendix

The copy of the appealed claims contained in the Appendix to the brief is correct.

(8) Evidence Relied Upon

6,661,472 Shintani et al. 12-2003

Application/Control Number: 09/844,932 Page 3

Art Unit: 2623

6,556,248	Kim	4-2003
US 20020129374A1	Freeman et al.	9-2002
5,760,848	Cho	6-1998
5,949,498	Rudolph	9-1999
US 20030105845A1	Leermakers	6-2003
6,529,742	Yang	3-2003

(9) Grounds of Rejection

The following ground(s) of rejection are applicable to the appealed claims:

Claims 7 and 15 are rejected under 35 U.S.C. 102(e) as being anticipated by

Shintani et al. (US006661472B2).

Regarding claim 7, Shintani et al. (Shintani) discloses a digital television or "portable user appliance", where inherently the digital television is easily movable or "portable" (See Fig. 1b). The digital television receives "a digital video stream embedded in excess bandwidth of an over-the-air digital broadcast television signal" (See column 1 lines 1-29), where a standard 6 MHz channel within the frequency spectrum or "over-the-air digital broadcast television signal" has "excess bandwidth" in order to carry extra "digital video streams". The digital television includes a "television tuner receiving the over-the-air digital broadcast signal" (See Fig. 1b, tuner 160; column 4 lines 24-30), where the tuner also serves as the "excess bandwidth frame grabber for receiving the digital video stream". The digital television also includes a channel processing circuit or "a digital decompressor for decompressing said digital video

stream into a decompressed video stream" (See Fig. 1b, channel processing circuit 170; column 4 lines 24-43) and a "display displaying the decompressed video stream" (See Fig. 1b, display 155; column 4 lines 42-43).

Claim 15 contains the limitations of claim 7 and is analyzed as previously discussed with respect to that claim.

Claims 1 and 13 are rejected under 35 U.S.C. 103(a) as being unpatentable over Kim (US006556248B1) in view of Freeman et al. (US 20020129374A1).

Regarding claim 1, Kim discloses a general TV receiving apparatus or "portable user appliance", where inherently the TV receiving apparatus is easily movable or "portable" (See Fig. 3). The TV receiving apparatus is able to receive HTML image and audio data or "digital video stream" this is "embedded in a vertical blanking interval of a broadcast television signal" (See Fig. 3; column 5 lines 6-31). The TV receiving apparatus includes a "television tuner for receiving the over-the-air broadcast signal" (See Fig. 3, tuner 11 and ANT; column 2 lines 48-57), a "vertical blanking interval frame grabber for receiving the digital video stream" (See Fig. 3, tuner 100 and TV decoder 103; column 5 lines 1-14), and a "display displaying the video stream" (See Fig. 3, CRT; column 5 lines 15-18). However, Kim does not disclose a "digital decompressor for decompressing said digital video stream into a decompressed video stream".

Freeman et al. (Freeman) discloses a system for transmitting digital data (e.g. video images and audio). Freeman discloses that the data is compress and then decompressed/decoded at the receiver or "digital decompressor for decompressing said

Art Unit: 2623

digital video stream into a decompressed video stream" (See Figs. 2 and 3, compressors 3 and decompressor/decoder 110; paragraphs 0050, 0053-0054). Therefore, it would have been obvious to one with ordinary skill in the art at the time the invention was made to modify the system and HTML decoder disclosed by Kim to compress the data transmitted over the system and for the HTML decoder to decompress the compressed data, as taught by Freeman, in order to reduce the data transfer requirements thereby using the available bandwidth more efficiently.

Claim 13 contains the limitations of claim 1 and is analyzed as previously discussed with respect to that claim.

Claims 2, 3, and 14 are rejected under 35 U.S.C. 103(a) as being unpatentable over Kim (US006556248B1) in view of Freeman et al. (US 20020129374A1) as applied to claims 1 and 13 above, and further in view of Cho (US005760848A).

Regarding claim 2, Kim in view of Freeman does not disclose a "cradle receiving said portable user appliance".

Cho discloses a video monitor or "portable user appliance" that can be used as a television receiver (See Fig. 2, column 1 lines 50-62). The video monitor includes a body apparatus or "cradle", where the video monitor can be docked with the body apparatus (See Fig. 2, video monitor 20 and body apparatus 10). Furthermore, the body apparatus is coupled to the antenna or "first antenna" of the video monitor (See Fig. 2). Therefore, it would have been obvious to one with ordinary skill in the art at the time the invention was made to modify the TV receiving apparatus disclosed by Kim in view of

Freeman to include a cradle that "receives the portable user appliance" and is coupled to the antenna, as taught by Cho, in order to provide an easy means of connecting and disconnecting cables and various other sources to the TV receiving apparatus thereby making the system more convenient for the user.

Regarding claim 3, the body apparatus is also disposed within an automotive vehicle (See Cho column 4 line 63 – column 5 line 18).

Claim 14 contains the limitations of claims 3 and 13 (wherein the antenna of the video monitor is also the "automobile antenna" since it's the antenna that receives the television signal within the automobile) and is analyzed as previously discussed with respect to those claims.

Claim 4 is rejected under 35 U.S.C. 103(a) as being unpatentable over Kim (US006556248B1) in view of Freeman et al. (US 20020129374A1) and in further view of Cho (US005760848A) as applied to claims 2, 3, and 14 above, and further in view of Rudolph (US005949498A).

Kim in view of Freeman and in further view of Cho does not disclose a "second antenna" and a "control circuit for determining a first signal strength of said first signal and a second signal strength of said second signal and comparing the first signal strength to the second signal strength and coupling the greater of the first signal strength and the second signal strength to said portable user device".

Rudolph discloses a diversity antenna system for receiving television signals.

The system includes multiple antennas or "second antenna" (See Fig. 2, antennas 9)

Art Unit: 2623

and a "control circuit for determining a first signal strength of said first signal and a second signal strength of said second signal and comparing the first signal strength to the second signal strength and coupling the greater of the first signal strength and the second signal strength to said portable user device" (See Fig. 2, antennas 9, diversity control 8, comparator 10, change-over switch 6; column 1 lines 10-25 and column 3 lines 40-67). Therefore it would have been obvious to one with ordinary skill in the art at the time the invention was made to modify TV receiving apparatus disclosed by Kim in view of Freeman and in further view of Cho to include a "second antenna" and a "control circuit for determining a first signal strength of said first signal and a second signal strength of said second signal and comparing the first signal strength to the second signal strength and coupling the greater of the first signal strength and the second signal strength to said portable user device", as taught by Rudolph, in order to ensure that the best possible signal is being received thereby ensuring higher quality video/audio signals.

Claim 5 is rejected under 35 U.S.C. 103(a) as being unpatentable over Kim (US006556248B1) in view of Freeman et al. (US 20020129374A1) as applied to claims 1 and 13 above, and further in view of Leermakers (US 20030105845A1).

Kim in view of Freeman does not disclose that the TV receiving apparatus is embodied as a "personal digital assistant".

Leermakers discloses personal multimedia appliances that can receive programs over various air or cable broadcast systems. The personal multimedia appliances take

the form of "personal digital assistant" that includes a tuner and display (See Fig. 2; paragraph 0011 and 0024). Therefore, it would have been obvious to one with ordinary skill in the art at the time the invention was made to modify the TV receiving apparatus disclosed by Kim in view of Freeman to be embodied as a "personal digital assistant", as taught by Leermakers, in order to provide an appliance that is easier to carry around in a bag or pocket of the user.

Claim 6 is rejected under 35 U.S.C. 103(a) as being unpatentable over Kim (US006556248B1) in view of Freeman et al. (US 20020129374A1) as applied to claims 1 and 13 above, and further in view of Yang (US006529742B1).

Kim in view of Freeman does not disclose that the TV receiving apparatus is embodied as a "cellular phone".

Yang discloses a cellular phone that is capable of receiving television signals. The cellular phone includes a TV tuner that is able to receive television programs and display the programs on the display (See Fig. 1). Therefore, it would have been obvious to one with ordinary skill in the art at the time the invention was made to modify the TV receiving apparatus disclosed by Kim in view of Freeman to be embodied as a "cellular phone", as taught by Yang, in order to provide an appliance that is easier to carry around in a bag or pocket of the user and that provides multiple functions, e.g. TV and phone.

Claims 8 and 9 are rejected under 35 U.S.C. 103(a) as being unpatentable over Shintani et al. (US006661472B2) in view of Cho (US005760848A).

Claim 8 contains the limitations of claim 7 and is analyzed as previously discussed with respect to that claim. However, Shintani does not disclose a "cradle receiving said portable user appliance".

Cho discloses a video monitor or "portable user appliance" that can be used as a television receiver (See Fig. 2, column 1 lines 50-62). The video monitor includes a body apparatus or "cradle", where the video monitor can be docked with the body apparatus (See Fig. 2, video monitor 20 and body apparatus 10). Furthermore, the body apparatus is coupled to the antenna or "first antenna" of the video monitor (See Fig. 2). Therefore, it would have been obvious to one with ordinary skill in the art at the time the invention was made to modify the digital television disclosed by Shintani to include a cradle that "receives the portable user appliance" and is coupled to the antenna, as taught by Cho, in order to provide an easy means of connecting and disconnecting cables and various other sources to the TV receiving apparatus thereby making the system more convenient for the user.

Regarding claim 9, the body apparatus is also disposed within an automotive vehicle (See Cho column 4 line 63 – column 5 line 18).

Claim 10 is rejected under 35 U.S.C. 103(a) as being unpatentable over Shintani et al. (US006661472B2) in view of Cho (US005760848A) as applied to claims 8 and 9 above, and further in view of Rudolph (US005949498A).

Shintani in view of Cho does not disclose a "second antenna" and a "control circuit for determining a first signal strength of said first signal and a second signal strength of said second signal and comparing the first signal strength to the second signal strength and coupling the greater of the first signal strength and the second signal strength to said portable user device".

Rudolph discloses a diversity antenna system for receiving television signals. The system includes multiple antennas or "second antenna" (See Fig. 2, antennas 9) and a "control circuit for determining a first signal strength of said first signal and a second signal strength of said second signal and comparing the first signal strength to the second signal strength and coupling the greater of the first signal strength and the second signal strength to said portable user device" (See Fig. 2, antennas 9, diversity control 8, comparator 10, change-over switch 6; column 1 lines 10-25 and column 3 lines 40-67). Therefore it would have been obvious to one with ordinary skill in the art at the time the invention was made to modify digital television disclosed by Shintani in view of Cho to include a "second antenna" and a "control circuit for determining a first signal strength of said first signal and a second signal strength of said second signal and comparing the first signal strength to the second signal strength and coupling the greater of the first signal strength and the second signal strength to said portable user device", as taught by Rudolph, in order to ensure that the best possible signal is being received thereby ensuring higher quality video/audio signals.

Art Unit: 2623

Claim 11 is rejected under 35 U.S.C. 103(a) as being unpatentable over Shintani et al. (US006661472B2) in view of Cho (US005760848A) and in further view of Rudolph (US005949498A) as applied to claim 10 above, and further in view of Leermakers (US 20030105845A1).

Shintani in view of Cho and in further view of Rudolph does not disclose that the digital television is embodied as a "personal digital assistant".

Leermakers discloses personal multimedia appliances that can receive programs over various air or cable broadcast systems. The personal multimedia appliances take the form of "personal digital assistant" that includes a tuner and display (See Fig. 2; paragraph 0011 and 0024). Therefore, it would have been obvious to one with ordinary skill in the art at the time the invention was made to modify the digital television disclosed by Shintani in view of Cho and in further view of Rudolph to be embodied as a "personal digital assistant", as taught by Leermakers, in order to provide an appliance that is easier to carry around in a bag or pocket of the user.

Claim 12 is rejected under 35 U.S.C. 103(a) as being unpatentable over Shintani et al. (US006661472B2) in view of Yang (US006529742B1).

Claim 12 contains the limitations of claim 7 and is analyzed as previously discussed with respect to that claim. However, Shintani does not disclose that the digital television is embodied as a "cellular phone".

Yang discloses a cellular phone that is capable of receiving television signals.

The cellular phone includes a TV tuner that is able to receive television programs and

display the programs on the display (See Fig. 1). Therefore, it would have been obvious to one with ordinary skill in the art at the time the invention was made to modify the digital television disclosed by Shintani to be embodied as a "cellular phone", as taught by Yang, in order to provide an appliance that is easier to carry around in a bag or pocket of the user and that provides multiple functions, e.g. TV and phone.

(10) Response to Argument

Appellant argues with respect to claims 7-12 and 15 that Shintani does not disclose excess bandwidth for carrying a digital video stream. However, reading the claims in the broadest sense, Shintani does meet the limitations of the claims. Shintani discloses a digital broadcast system that in implemented over a conventional analog broadcast system. A single physical channel represents one 6 MHz channel, where in the analog case, one analog signal is carried in the 6 MHz channel. However, in the digital case, that one 6 MHz physical channel has "excess bandwidth" to carry more that one digital stream or virtual channels. Shintani discloses that the single physical channel can include multiple virtual channels (See column 1 lines 18-29).

Appellant also argues with respect to claims 1-6, 13, and 14 that Kim does not disclose a vertical blanking interval grabber. However, reading the claims in the broadest sense, Kim does disclose the limitations recited in the claims. Kim discloses that the HTML data signal is transmitted in the vertical blanking interval (VBI). Kim also discloses a TV tuner and TV decoder that serve the function of the "vertical blanking interval frame grabber", wherein the TV tuner and TV decoder receive the HTML data

Art Unit: 2623

signal from the VBI and extracts the HTML data signal in order to provide the signal to the HTML decoder (See Fig. 3; column 5 lines 1-14).

Appellant further argues with respect to claims 1-6, 13, and 14 that Kim in view of Freeman does not disclose a digital decompressor for decompressing a compressed digital signal in the VBI. Furthermore, in response to appellant's argument that the examiner's conclusion of obviousness is based upon improper hindsight reasoning, it must be recognized that any judgment on obviousness is in a sense necessarily a reconstruction based upon hindsight reasoning. But so long as it takes into account only knowledge which was within the level of ordinary skill at the time the claimed invention was made, and does not include knowledge gleaned only from the applicant's disclosure, such a reconstruction is proper. See *In re McLaughlin*, 443 F.2d 1392, 170 USPQ 209 (CCPA 1971).

Kim discloses that HTML data signals are transmitted in the VBI. Freeman discloses a system that is able to compress/decompress signals in a video communications system in order to reduce the data transfer requirements thereby using the available bandwidth more efficiently (See Freeman paragraph 0050). Therefore, the combination of Kim in view of Freeman would compress the HTML data signals at the transmitter and decompress the HTML data signals at the receiver, wherein the HTML data signals are transmitted within the VBI.

Appellant further argues with respect to claim 3 that Cho does not disclose a cradle disposed within an automotive vehicle. However, reading the claims in the broadest sense. Cho does meet that limitation. Cho discloses an apparatus body 10

Application/Control Number: 09/844,932 Page 14

Art Unit: 2623

(See Fig. 2) that serves as a cradle for portable television 20. Cho further discloses that the portable television 20 is connected to an automobile, where the apparatus body 10 is replaced with an apparatus body that will allow the portable television to connect to the automobile (See column 4 line 63 – column 5 line 18).

Appellant also argues with respect to claim 14 that Cho does not disclose an automobile antenna. However, reading the claim in the broadest sense, Kim in view of Freeman and in further view of Cho does meet the limitations of the claims. Cho discloses that the unit is connected to the automobile thereby making the unit part of the automobile (See Cho column 5 lines 1-8). The antenna of the video monitor is then used to receive television broadcasts, wherein the antenna is within the automobile.

(11) Related Proceeding(s) Appendix

No decision rendered by a court or the Board is identified by the examiner in the Related Appeals and Interferences section of this examiner's answer.

For the above reasons, it is believed that the rejections should be sustained.

Respectfully submitted,

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